

NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR October 2002
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE November 7th , 2002

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)

October is usually one of our drier months; however, this October was characterized by one word...WET! From the 2nd and the 3rd of the month, Hurricane Lili moved through central Louisiana dumping from 1 to 4 inches of rainfall over the HSA with the heaviest over northeast Louisiana.

For the remainder of the month, a series of impulses moved along a strong southern jet stream. On the 9th and 10th, a strong upper low dumped 2 to 5 inches over the lower Yazoo River system while the remainder of the area received from 0.5 to 1.5 inches. On the 14th and 15th, a strong surface low in the north central Gulf of Mexico produced rainfall in southeast and east Mississippi. Rainfall amounts ranged from .50 to near 2.00 inches. On the 19th and 20th, another upper low pressure produced rainfall amounts from 1 to 3 inches mostly over northeast Louisiana, southeast Arkansas, north and central Mississippi with much lighter amounts elsewhere. The wettest period of the month occurred from the 23rd to 29th of the month where rainfall was reported over most portions of the HSA during this time. (On the 28th and 29th, a strong southwest Gulf of Mexico low pressure moved across the area). Rainfall during this time period ranged from 1 inch to near 7 inches, with the heaviest over southwest and central portions of Mississippi. Heaviest 24 hour totals during the time period were as follows: 4.88 inches at Raleigh, MS (28th); 3.90 inches at Carthage, MS (28th); 3.89 inches at Meridian (28th); 3.50 inches at Noxapater, MS (28th); 3.04 inches at Purvis, MS (26th); 3.03 inches at Natchez, MS (26th) and 3.02 inches at Newton, MS (28th).

At the beginning of the month, above normal soil moisture conditions were observed over much of Mississippi while near normal conditions were observed over northeast Louisiana and southeast Arkansas. Much above normal October rainfall over all of the HSA has left soil conditions well above normal. Minor river flooding was observed on the upper and lower Pearl River, Tuscolameta Creek, Yockanookany, Yalobusha, Big Sunflower and the upper Chickasawhay. On the upper Big Black river, moderate flooding occurred mostly over agricultural lands where several thousand acres of cotton crops were flooded. Only minor flooding occurred on the lower portions of the Big black River. Flood potential for HSA rivers will be high over the next several months. See October E-3 report for information on flood crests. Rainfall for the month of October:

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
<i>Southeast Arkansas (Chicot & Ashley counties)</i>	<i>5.50 to 7.75 inches</i>	<i>Much Above Normal.</i>
<i>Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)</i>	<i>7.00 to 9.00 inches northern sections</i>	<i>Much Above Normal.</i>
	<i>7.00 to 9.00 inches central sections</i>	<i>Much Above Normal.</i>
	<i>9.00 to 12.00 inches southern section</i>	<i>Much Above Normal.</i>
<i>Lower Yazoo</i>	<i>7.00 to 10.50 inches</i>	<i>Much above normal.</i>
<i>Big Black</i>	<i>6.00 to 9.00 inches upper and middle sections.</i>	<i>Much above normal.</i>
	<i>9.00 to 10.00 inches lower sections</i>	<i>Much above normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>9.00 to 12.50 inches</i>	<i>Much above normal.</i>
<i>Pearl (abv Jackson)</i>	<i>8.00 to 11.00 inches</i>	<i>Much above normal.</i>
<i>Pearl (Blo Jackson)</i>	<i>7.00 to 10.00 inches</i>	<i>Much above normal.</i>
<i>Pascagoula</i>	<i>6.00 to 13.00 inches over the Leaf basin.</i>	<i>Much above normal.</i>
	<i>7.00 to 9.00 inches over the Black Creek basin.</i>	<i>Much above normal.</i>
	<i>7.00 to 10.50 inches over the Chickasawhay</i>	<i>Much above normal.</i>
<i>Tombigbee and tributaries in the JAN HSA</i>	<i>6.50 to 9.00 inches</i>	<i>Much above normal.</i>

The heaviest rainfall amounts in the HSA for the month were: 13.04 inches at Raleigh, MS; 12.52 inches at Vicksburg, MS; 12.52 inches at Meadville,

MS; 12.13 at Red River Lock/Dam #1, LA; 12.05 inches at Paulding, MS; 11.74 inches at Larto Lake, LA; 10.96 inches at Philadelphia, MS; 10.64 at Edinburg, MS.

Here at the Jackson WFO, the October monthly rainfall was 7.18 inches, which was 3.76 inches above normal. 7.18 inches of rainfall ranks as the 8th highest rainfall for the month of October in Jackson. Ending October 31st, we have had 57.95 inches of rain thus far this year, which is 12.38 inches above normal.

At the Meridian Airport, the October monthly rainfall was 10.32 inches, which was 7.04 inches above normal. Ending October 31st, Meridian has had 46.67 inches of rain thus far this year, which is 1.72 inches below normal.

The Mississippi River from Arkansas City, AR to Natchez, MS crested during the first 10 days of the month with a secondary crest occurring over the final week of the month. The river was at or above seasonal norms from Arkansas City to Natchez for the month. The provisional high and low stages for October are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	12.04	10/05	5.70	10/31
Greenville, MS	23.32	10/05	16.40	10/01
Vicksburg, MS	18.01	10/06	10.30	10/01
Natchez, MS	24.60	10/07	17.13	10/01

Total Flood Warning products issued: 19

Total Flood Statement products issued: 89

Daily Rainfall Products (RRA'S) issued 31

Daily River Forecast Products (RVS'S) issued 31

Daily River Stage products (RVA'S) issued 31

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District

USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
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Southern Region Climate Center
Pat Harrison Waterway District